

# COMMUNICATIONS SITE COMPLEX MANAGEMENT PLAN FOR OWYHEE RIDGE

Prepared by the United States Bureau of Land Management  
Vale District Office

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# OWYHEE RIDGE COMMUNICATIONS SITE COMPLEX MANGEMENT PLAN

## TABLE OF CONTENTS

I.	<b>Introduction</b> .....	pg.3
	A. Definitions .....	pg 4
	B. Abbreviations.....	pg 4
	C. Relationship of Plan to .....	pg 5
II.	<b>Current Situation</b> .....	pg 6
	A. Objectives.....	pg 6
	B. Authority.....	pg 7
III.	<b>General Responsibilities</b> .....	pg 8
	A. BLM.....	pg 8
	B. Facility Managers/Owners .....	pg 8
	C. FCC .....	pg 9
IV.	<b>Authorized Uses and Users within a Facility</b> .....	pg 9
V.	<b>Development</b> .....	pg 10
	A. Designated Site Area .....	pg 10
	B. Conditions for Construction, Modification, Expansion.....	pg 17
	Proposal Process .....	pg 18
	C. Construction Methods.....	pg 19
	D. Construction Inspection .....	pg 20
	E. New/Remodel Building .....	pg 20
	F. New/Remodel/Expanded Towers .....	pg 21
VI.	<b>Standards</b> .....	pg 22
VII.	<b>Users Association</b> .....	pg 23
VIII.	<b>Land Availability</b> .....	pg 23
VIII.	<b>Plan Implementation, Monitoring and Revision</b> .....	pg 24
X.	<b>Application Procedures</b> .....	pg 24
	Exhibits	
	Appendix A. Map .....	pg 25
	Appendix B. User Data Table .....	pg 26
	Appendix C. Photos of Existing Sites .....	pg 27
	Appendix D. Communication Site Inspection Checklist Example.....	pg 29
	Appendix E. Communication Tower Inspection Checklist Example.....	pg 30

## **Owyhee Ridge Communication Site Complex Plan**

### **June 21, 2004**

#### **I. INTRODUCTION**

This Owyhee Ridge Communication Site Complex Management Plan (ORCSCMP) has been developed to document and evaluate the existing communications facilities located on Owyhee Ridge and to provide an outline for any future development in an orderly manner and in accordance with the Bureau of Land Management's (BLM) Southeastern Oregon Resource Management Plan (SEORMP) completed in September of 2002. Current facilities are shown on the attached Appendix A map, dated June 21, 2004. Users, tenants, and customers shown in Appendix B, User Data Table dated June 21, 2004, are covered by this Plan. (Appendix C shows photos of current sites) New tenants or customers may continue to be accommodated within the confines of existing buildings and/or towers according to the terms of the Lease and direction in this Plan.

This ORCSCMP is intended to be used by Bureau of Land Management officials administering communications uses on Owyhee Ridge, existing lessees, and applicants desiring a lease or a lease amendment. This Complex Plan has technical standards for better management of the Owyhee Ridge Communications Site Complex, management plan and will be modified in the future as needs and conditions warrant.

#### **A. Definitions**

The terms used in this communication site management plan conform to the definitions listed in the October 27, 1995, Federal Register notice "Fee Schedule for Communication Uses on Bureau of Land Management Lands" and to clarifications provided in Bureau of Land Management Handbook 2860-1. In the event of a conflict, the cited documents will govern.

The words "lease" and "lessee" as used in this site complex plan refer to the relationship between the BLM and the communications use leaseholder, the lessee. The words "customer" and "tenant" refer to the relationship between the lessee and the occupants in the lessee's facilities.

**LEASE** – An authorization issued to a communication facility owner or facility manager, allowing for the use of Public Lands to construct and or operate a communications facility and unless specifically prohibited, to sublease to occupants in that facility.

**LEASEHOLDER OR LESSEE** – Facility Owner/Facility Manager

**CUSTOMER**- Is an entity that pays a facility owner, facility manager or tenant, for communications services and is not re-selling or broadcasting communications services to others.

**TENANT** - A communication user who rents space in a communications facility and operates communication equipment for the purpose of re-selling, or broadcasting communications services to others for profit.

**COMMUNICATION SITE** - An area of Bureau of Land Management administered public land designated through the land and resources management planning process. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name; usually a local prominent landmark, such as Owyhee Ridge.

**FACILITY MANAGER** - means a person or entity that (1) holds a communication use right-of-way, (2) owns a communication facility on public land, (3) leases space in the facility to communication users, and (4) does not own or operate his or her own communications equipment in the facility for personal or commercial purposes.

**FACILITY OWNER** – means a person or entity that (1) holds a communication use right-of-way, (2) owns a communication facility on public land, (3) may or may not lease space in the facility to other communication users, and (4) owns and operates his or her own communications equipment in the facility for personal or commercial purposes.

**NON-BROADCAST** – This category includes Commercial Mobile Radio Service (CMRS), Facility Managers, Cellular Telephone, Private Mobile Radio Service (PMRS), Microwave, Local Exchange Network, and Passive Reflector.

**BROADCAST** - This category includes Television Broadcast, AM and FM Radio Broadcast, Cable Television, Broadcast Translator, Low Power Television, and Low Power FM Radio.

**LOW POWER SITES** – are less than 250 watts

**HIGH POWER SITES** – are greater than 251 watts. According to industry standards, there needs to be a minimum one mile separation between low power and high power users. High power users can have an interference impact on low power users if separation is not considered in any site location.

## **B. Abbreviations**

- ANSI/TIA/EIA-222, Standard, American National Standards Institute, Telecommunications Industry Association, Electronic Industry Association
- CPI-U: Consumers Price Index, All Urban Consumers (identifies pricing zones)
- BLM: Bureau of Land Management
- FCC: Federal Communications Commission
- FM: Facility Manager
- NEPA: National Environmental Policy Act
- NTIA/IRAC: National Telecommunication and Information Administration-Interagency Radio Advisory Committee
- OSHA-Occupational Safety and Health Administration
- RMA: Rationally Metro Area (population zones)
- SEORMP: Southeastern Oregon Resource Management Plan

## **C. Relationship of This Plan to the Communication Site Lease/Right-of-way(s)**

This site complex management plan will be incorporated into all lease/right-of-ways issued for this communications complex and will be used in conjunction with the lease/right-of-way. Provisions of the site complex management plan are enforced through the Lease/Right-of-way. Each lessee is expected to include the requirements of the lease/right-of-way and the site management plan into any documents, which describe the business relationship between the lessee and the lessee's tenants and customers. The lessee is responsible for enforcing those provisions.

## **Location**

The site complex is located approximately eight miles southwest of Adrian, Oregon, in Malheur County and is approximately 30 miles south of Vale, Oregon. It is located in Sections 13, 21, 27 and 34, of Township 22 S, Range 45 E, and Sections 3, 9, 10, 11, 14 and 15, of Township 23 S., Range 45 E., and in Sections 6, 7, and 19 of Township 22 S., Range 46 E., of the Willamette Meridian.; ranging in elevation from 3640 feet to 4658 feet.

<b>Site</b>	<b>Elevation</b>	<b>Site: Current/Potential</b>	<b>High (H)/Low (L) Power Sites</b>
A.	3640 ft.	Owyhee Irrigation District	L
B.	3790 ft.	Bureau of Land Management	L
C.	4095 ft.	Potential	L
D.	4101 ft.	R & S Media	H
E.	4623 ft.	Eliminated	N/A
F.	4642 ft.	Eliminated	N/A
G.	4623 ft.	Eliminated	N/A
H.	4658 ft.	Potential	L/H
I.	3600 ft.	Eliminated	N/A
J.	3592 ft.	Potential	L/H
K.	3600 ft.	Potential	L/H
L.	4560	Eliminated	N/A

Electronic transmission coverage is confined to a range of approximately 100 miles or less, and is limited primarily by the topography of the surrounding country side and operating frequency. AM and FM 50,000 watt transmissions may have an effective range of 60 to 250 miles and may also be limited by topography and operating frequency.

## **Population Served**

The Communication Uses Rental Schedule provides rental rates by population zones for various communication uses and reflects the annual adjustment based upon the change in the Consumer Price Index, All Urban Consumers (CPI-U). The schedule is posted on the BLM Washington Office external web page at [www.blm.gov](http://www.blm.gov) under the Lands and Realty section.

To define the community served, BLM determines the appropriate population strata by identifying the “community” served by the site. Geographic areas are identified by Rand McNally, called Ranally Metro Areas (RMA).

## **The Process**

BLM first determines if the site serves a listed RMA. If not an RMA, BLM determines the largest community or city served by the site as listed in the most recent Rand McNally Road Atlas. If the largest community served is less than 25,000, or does not serve a community, then BLM uses the lowest rent shown on the schedule for the type of use.

## **II. CURRENT SITUATION**

There are currently three buildings on three different peaks (A, B, and D1, per Appendix “A” map) in the complex area with four authorized Right-of-Way holders. The BLM site (OR-13896) (site B) and the Owyhee Irrigation District (OR-14197) (site A) are low power translator non broadcasting facilities. Solar power is the primary electrical power at the BLM site (site B). The Owyhee Irrigation District is served by a single phase 7.5 Kv electrical power line from a utility substation near the Owyhee Dam area. A buried fiber optic line passes sites A & B, but is unavailable because of its size limitations. R&S Media (OR-56585), located at site D, has a high power FM broadcast communications tower and transmitter facility and is served by a 7.5 Kv electrical power line. The fiber optic line serves this site.

Physical and legal access is available by traveling one of three access routes (a) the Owyhee Dam road which is below the Owyhee Reservoir Dam site via a Malheur County Road, is very rough and steep and requires a 4x4 vehicle to traverse the road route. The length of the access road is approximately two miles; (b) The Tunnel Canyon road via the Malheur County road, is not as rough and steep as the Owyhee Dam access route, but does cross some side hill slopes which can be challenging during periods of adverse weather conditions. The length of the access road is approximately three miles; or (c) the Cherry Creek road via the Succor Creek road is the least rough and steep, but the longest of the three routes. The length of this access road is approximately seven miles. This route would be the preferred route when visiting the sites or when hauling construction materials and/or equipment to the complex area. Vehicles with 4 wheel drive are recommended.

The communication site complex is not accessible by motor vehicle during the months of December through mid February and sometimes as late as March. Winter time accessibility to the communication site complex is either by helicopter, snow cat or snow mobile.

### **A. OBJECTIVES**

This complex site management plan will accomplish the following objectives:

1. Document site complex management policy, procedures and standards, which are not already specified in the standard communication site lease/right-of-way.
2. Manage Owyhee Ridge Communication Site Complex as a high power and low power site

meeting translator broadcasting and wireless objectives of the area. Space and physical separation for high power uses will be necessary.

3. The site complex will be systematically developed to maximize the number of compatible uses while ensuring safety and protection of resources while meeting other resource management objectives.
4. Negotiate and provide for administrative access to the agency (BLM) and its assigns.
5. Protect the interests of lease holders, facility site users and the public by preserving a safe and electronically "clean" environment. Remove unused equipment shelters, antennas, towers and materials from the site complex.
7. Encourage the efficient development and use of space and facilities within the designated site complex, subject to the BLM goal to help fulfill the public need for adequate communication sites, and provide the best possible public service at reasonable cost while meeting other resource management needs.
8. Maintain visual quality objectives by requiring design standards that are unobtrusive and by utilizing earth tone colors and non-reflective surface material consistent with the standards in the SEORMP and agency policy.
9. Consider formation of an Owyhee Ridge Users Association.

## **B. AUTHORITY**

BLM authority to authorize communications uses on public lands is granted by the Federal Land Policy and Management Act of 1976, 90 Stat. 2776 (43 U.S.C. 1761-1771) and is reflected in Title 43, Code of Federal Regulations (CFR), Sections 2801-2803 and WO IB 98-23.

BLM authority for communications site management planning is contained in BLM Handbook 2801-1, Plan of Development. Directions and policy for communication use authorizations is contained in BLM Manual, section 2860.

Authority for the issuance of authorizations and/or licenses for the transmission and reception of electronic radiation for communication purposes is granted by Congress and administered by the Federal Communications Commission (FCC) and/or the National Telecommunication and Information Administration-Interagency Radio Advisory Committee (NTIA/IRAC).

### **TEAM MEMBERS CONTRIBUTING TO THIS PLAN INCLUDE:**

1. Susie K. Manezes, Communication Site Manager, Realty Specialist
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3. Jon Freeman, Realty Specialist
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8. Diane Pritchard, Archaeologist

9. Jon Westfall, Geologist
10. Shaney Rockefeller, Soil Scientist
11. Al Bammon and Brandon Knapton, Wildlife Biologist's
12. Jean Findley, Botanist
13. Mitch Thomas, Range Management Specialist
14. Lynne Silva, Weed Specialist
15. Randy Eyre, Fire

### **III. GENERAL RESPONSIBILITIES**

#### **A. BLM retains the responsibility for:**

1. Issuing and amending leases and existing rights-of-way to facility owners and facility managers. Granting occupancy and use of Public Lands rests exclusively with the BLM Title 43 CFR Sections 2801-2803. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of Public Lands.
2. Approving any new/modified facility(s) at the site.
3. Approving amendments to leases to qualified buyers of facilities on the site.

#### **B. Facility Owners and Facility Managers (or their designated representatives) are responsible for:**

1. Complying with their authorization and all sections of this Communications Site Complex Management Plan.
2. Ensuring that all new facilities; expansion, or improvements are consistent with the Vale District SEORMP; any environmental document(s)/decisions for the site; and, this Site Management Plan.
3. Lessees are not authorized to place, nor have tenants place additional buildings, equipment shelters, and/or towers upon their lease area without written authorization from the BLM. The primary configuration of a lease is one building and one tower. Any additional buildings or towers must be authorized by the BLM and amended in the lease instrument.
4. Ensuring facilities/equipment not complying with Federal/State/Local laws/regulations/ordinances will be removed or modified within one year of the approval of this plan.
5. Keeping all facilities within the established limits of their authorized area.
6. Providing the BLM with the name, address and phone number for a local contact person. The Facility Owner and Facility Manager and the contact person may be the same individual. The contact person will be available for emergencies and will have the authority to make decisions about construction issues, facility maintenance and all equipment within the facility.
7. Adhering to the terms of the Facility Owner/Manager Lease or Right-of-way:
  - a. Facility Owners and Facility Managers are authorized to rent buildings/tower space to tenants and/or customers without prior written approval from the BLM.



b. Tenants and/or customers using a facility covered by a Facility Lease/right-of-way will not have separate BLM permits to authorize use.

c. Facility Owners and Facility Managers are responsible for complying with the terms and conditions of the Facility Lease or their valid right-of-way. Facility Owner/Managers are also responsible for ensuring that their tenants and customers are in compliance with the terms and conditions of the Lease or right-of-way, and applicable FCC or NTIA/IRAC license terms and/or customers.

d. The Facility Owner and Facility Manager may not place any unreasonable restrictions, or any restrictions, restraining competition or trade practices on tenants and/or customers, or potential tenants and/or customers.

8. Ensuring that all communications equipment is properly installed, operated, and maintained.

9. Ensuring that all communication equipment meets ANSI, FCC and BLM regulations, guidelines and standards concerning radiation limitations.

a. Monitoring radiation levels at their facility and;

b. Immediately correcting any radiation levels that are, or could be a hazard to human health. (FCC, 47CFR sections 1.1307(b), 1.1310 and 2.1093) and FCC OET Bulletin 54, August 1999.

10. Providing a certified copy of their use and the category of use along with the current phone numbers and addresses of all tenants and customers as of September 30 each year. This report is due by 15 October.

11. Keeping the premises around their buildings free of trash and debris and weeds.

12. Placing the lessee/right-of-way holder's name, address, phone number, and authorization number on the door of their communication site building.

#### **C. FCC and NTIA/IRAC are responsible for:**

The responsibilities of the FCC and NTIA/IRAC are frequency management. Correcting interference problems is the responsibility of the affected licensees. The FCC and NTIA/IRAC are not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the authorizations.

#### **IV. AUTHORIZED USES AND USERS WITHIN A FACILITY**

##### **A. Exclusive Use of a Facility By a Single User**

Currently BLM and R&S Media are single user facilities.

##### **B. Use by Multiple Users**

The Owyhee Irrigation Communication Site currently has multiple users. Facility Owners and Facility Managers are not required to lease facility space to others if they can prove to the authorized BLM officer that

1) space is not available, 2) the use is incompatible with the existing facilities, 3) additional space is needed by the facility owner/manager, 4) additional users would violate system security needs; or 5) potential interference is not resolvable.

## **V. DEVELOPMENT:**

Development and management of the site shall be subject to the following requirements, which are in addition to the specifications of the standard lease/right-of-way. **In the event of a conflict, lease /right-of-way language governs.**

### **A. Designated Site Area**

The BLM or Authorized Officer will designate each area of use by a lessee. Sites identified for this complex management plan include Sites, A, B, C, D, H, J, K, and L. Sites E, F, and G, I, and L were eliminated because they did not meet with management objectives.

#### **1. Utility Development**

All utility and communication lines are primarily overhead. However, when feasible, the lines will be buried. Solar power and propane may be allowed. All facility owners are responsible for providing fuel storage (propane) and emergency power for their tenants. No tenants will be authorized their own fuel tank and/or generator.

#### **Fuel Storage**

Fuel storage will preferably be consolidated into a tank large enough in size to accommodate all tenants by each facility owner. At a minimum, tanks will be grouped together in a consolidated area adjacent to their facilities. All fuel storage tanks must meet current fire department, Federal, State and County safety and hazardous materials requirements. All tanks will be:

- A. Signed in red letters, “**SMOKING OR OPEN FLAME PROHIBITED WITHIN 20 FEET**”;
- B. In conformance with National Fire Protection Association (NFPA) requirements; and,
- C. Painted an approved color, or screened by an enclosure to blend in with the natural environment. If an enclosure is used, it must be pre approved and painted an approved color.

#### **2. Lessee Review**

A proposal for a new lease will come to the BLM and the BLM will provide copies to each Lease/right-of-way Holder. Review of proposals coming directly to a Lease Holder for a new tenant and/or customer will be shared with the other Lease Holder(s). It is expected that lessees will involve their own tenants and customers in this review. The general review time is 30 days.

#### **3. Buildings And Antennae Support Structures**

All structures must meet the requirements governing designs of facilities as outlined in the most

recent edition of applicable building codes. Where there is a conflict in code between Federal, State, or local sources, the most stringent version will be used. If cultural or paleontological resources are encountered during any future activities at a project area, all work will cease and appropriate archaeological personnel will be notified.

All facilities authorized shall be capable of accommodating multiple tenants/customers, (minimum of two customers) unless the requirement is waived by the BLM. The primary reason for a waiver would be a problem with technical compatibility and space. There may be other reasons.

Whenever it is reasonable, as determined by the BLM, new complex site users will be required to locate in or on existing facilities. The BLM reserves the right to authorize or deny additional leases at any appropriate time (site space permitting). The following examples are provided to demonstrate the circumstances under which the BLM might deviate from the general development principle of maximizing use of existing space before authorizing new leases: 1) to respond to verified instances of unfair business practices of the current lessee(s); and 2), to deal with technical problems which can't be reasonably solved in an existing facility; and 3), to meet other resource management objectives. These examples are not intended to be an all-inclusive list that may prompt the BLM's consideration for issuing a new lease when existing space is not fully utilized.

Existing facilities should be operated and maintained for additional tenant and/or customer uses when feasible and space is available.

Structures shall be constructed and maintained, as much as possible, to take advantage of vegetative and topographic screening while providing maximum service area for telecommunications purposes and minimizing interference. Applications must provide sufficient data so the visual compatibility of the proposed structures, landform or vegetation changes can be evaluated.

**a. Buildings:**

Building design should, when possible, include provisions for separate compartments for each individual tenant or customer.

Exterior surfaces will be painted with flat (non-glossy) paint or stain in an earth tone color or be constructed of compatible colored materials. In general, all facilities will be painted or constructed in a color approved by the BLM Authorized Officer.

All new buildings shall be generally uniform in shape and roof style and approved by the BLM authorized officer.

Locate buildings as a complimentary feature to existing structures, vegetation, rock, etc., rather than silhouetted on the skyline as viewed from traveled or populated areas or high recreation areas. Buildings should be set back from the brow edge of a hill, bench, ridge, or located in terrain dips and saddles which will allow the buildings to be less visible from a populated area and/or areas with high recreation use.

Commercial prefabricated rock aggregate buildings or prefabricated fiberglass buildings anchored to concrete piers will be permitted. Stick built metal and wood frame buildings will not be allowed. New lightweight communication shelter technologies have recently been developed which allow for shelter expansion. These shelters would be permitted provided that the colors and the type of surface finish are approved by the Authorized Officer; and approval of these structures would be on a case by case basis. Local building codes must be met.

**b. Antenna Support Structures:**

All antenna support structures shall be constructed and maintained in a neat and safe condition in accordance with good engineering practices as accepted by industry and applicable laws. Antenna supports shall conform to the installation specifications of the tower manufacturer. Any variations from these standards shall be allowed only to the extent required because of local terrain or obstructions at the site and must be approved by the BLM in advance. All variances shall conform to good engineering practices. Antenna support structures will be built to the current version of the American National Standards Institute (ANSI) EIA/TIA-222 standards. In addition, the structure will meet BLM standards for wind and ice loading.

Antenna support structures will be designed to accommodate the reasonably predictable needs to match the equipment space available in the building.

Antenna support structures will be located so that they visually blend in with other site features as much as reasonable.

Towers/Antenna support structures will conform to FAA regulations.

All antennas not in immediate use will be terminated in their characteristic impedance ( $Z_0$ ) to prevent re-radiation of intercepted signals or noise. And, all broken antennas will be repaired or removed from the site. All antennas shall be the DC grounded type.

All metallic structural materials will be galvanized, plated, coated, or painted. Dissimilar metals will not be placed in contact with each other in such a manner that could create a galvanic junction.

Physical deterioration, which weakens the structure or may cause electromagnetic interference, shall be corrected within a time limit specified by the BLM.

Anti-climb devices, removable steps, or other means to discourage unauthorized climbing of the towers shall be used.

All transmitters will have protective devices such as circulators, isolators, cavities, duplexers, or low pass filters, etc., designed into or externally installed to minimize direct interference to other users.

Combining transmitters shall be implemented when technically feasible to minimize overall antenna mass and height.

**c. Wiring and Grounding**

A common grounding system shall be developed and shared by all lessees on the site. All facilities will be connected to this system. The system will meet the standards of ANSI/TIA/EIA – 607-1994, be consistent with standard ANSI/EIA/17A-568-1991, and be installed in accordance with standard ANSI/EIA/TIA – 569-1990.

1. All equipment is to be installed within existing buildings and on equipment racks/cabinets that are grounded and shielded. Grounding is to be installed in accordance with accepted standards.
2. All electrical wiring and grounding must meet the Nation “Electrical Code” and applicable estate codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed on all power distribution panels.
3. Lightening protection “down” conductors installed upon communications towers shall be treated as “Transmission lines”. Therefore, they shall have an insulating jacket. Periodic bonding of the down conductor to the tower (galvanized) steel shall be made with proper bonding connectors that are tin planted or made of brass.
4. Site or facility grounding must be constructed of copper, with #2 AWG or larger wire or 2” or larger solid copper strap, connected to an adequate site/facility ground electrode system. The site/facility ground electrode system shall be bonded to the power service entrance grounding electrode conductor. Guy wires shall also be grounded using manufacture’s approved methods to preclude bi-metallic junction and corrosion. All equipment on the site (buildings, towers, power units, transmitters, receivers, antennas, combiners, telephone systems, power cabinets, HVAC units, etc) must be connected to the site/facility ground by direct connection. Electrical system ground wiring is required for electrical ground fault protection and circuit breaker coordination. High power operations should use copper strap bonding in accordance with manufactures specifications. The grounding systems shall comply with applicable laws, codes and in accordance with standard engineering practice. Below ground connections must use either an exothermic welding process (i.e. Cadweld, Thermoweld, etc.) copper wedge pressure devices (i.e. Ampact, Wrench-lock, etc.), or brazed copper connections in conjunction with a mechanical UL listed connector (to be used as a physical strength enhancement component). Brazing by itself is not an acceptable method of bonding below earth (buried) communications equipment.

#### **d.Microwave Dishes**

Microwave dishes shall be compatible with other uses at the site.

#### **e.Noise Levels**

Any new tenants or customers will not subject the current users of the site to a noise level greater than 10 db below the currently measured “noise floor” on all frequencies reasonably removed from the holder’s own frequency, thereby not causing any measurable degradation to existing receiver performances. This will be accomplished by the use of bandpass type filters and any notch type filter that may be necessary.

#### **f. Equipment Ownership**

All equipment shall be labeled with:

1. The owner's name;
2. Transmitter frequency(s);
3. A valid FCC, or IRAF, authorization;
4. Transmitting power output(s); and
5. A current 24 hour phone contact number.

#### **g. Transmitting Equipment**

All transmitters will have protective devices (shields, filters, isolation components), designed into or externally installed, to prevent interference with other users. All transmitters will meet FCC licensing requirements.

The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system will be prevented by the use of appropriate filters (wide band and narrow band broadcast transmitters).

The direct radiation of out-of-band emissions (i.e. noise or spurious harmonics) will be reduced to a level such that they may not be identified as a source of interference as defined in the FCC Rules and Regulations (e.g. Part 90.209(e)). If site noise (electromagnetic noise) becomes an issue, noise threshold limits will be established, and amended into the Site Plan.

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loaded circulators are to be capable of dissipating the total output of the transmitter.

#### **h. Receiving Equipment**

A bandpass device (cavity, crystal filter, etc.) is recommended at the input of all receiving devices. Cavity filters, or other protective device, may be used at receiver inputs to reduce interference.

Where duplexing is used, use of the notch type device should be avoided. In situations where a notch type device is used, a bandpass filter must be used with the transmitter.

#### **i. Tower**

Generally only one tower is authorized for each facility owner. Facility Owners and Facility Managers may obtain permission to construct a second tower only after submitting evidence that demonstrates that their existing tower is completely filled and full use has been made of combining systems. When a single equipment building is required, multiple antenna support structures may need to be designed and authorized to accommodate all uses without interference. Facility owners and managers would have to justify to the BLM the need for additional towers or structures

All towers will be left unpainted, if they are dull galvanized steel. Paint is required, only if they have a shiny (i.e. reflective) surface. Only non-reflective, Bureau of Land Management approved dark gray to

green colors will be approved unless FCC requires red/white striping.

No lights, beacons or strobes will be allowed on towers (including antennas). And the maximum tower height for the complex is 199 feet.

**j. Antennas**

As stated, the maximum antenna height will be 199 feet. Microwave (dish) antennas (other than ground mounted satellite dishes) will be limited to a maximum of ten (10) feet in diameter. Smallest diameter dishes are preferred if technically feasible.

All antennas must meet all OSHA safety standards. If an antenna exceeds FCC public or occupation standards (see FSS OET Bulletin 57), it will be remedied within 24 hours after measures are taken or isolated (e.g. fencing, signing, relocation, lowering power levels are all possible remedies). Ground measurements of Radio Frequency Radiation, (RFR), levels will be taken before mitigation measures are implemented.

Color(s) for dish antennas, or covers, must be pre-approved by the Bureau of Land Management.

Antennas will be treated for low to non-reflectance, as approved by the BLM authorized officer.

**k. Interference**

The responsibility for correcting interference problems is a matter for resolution between the permit/lease holder of the facility(s), the user causing the interference, and the affected party(s). Generally, the first users on a site have seniority with respect to the resolution of interference complaints. Senior holders have an obligation to maintain their equipment to industry standards, to utilize systems that are in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the Bureau of Land Management authorization. New users on a site must correct, at their expense, interference problems that they create. They must cease operation of the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment moved.

The Bureau of Land Management does not have authority for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems must be coordinated with the FCC or NTIA/IRAC, whichever is appropriate.

Interference with law enforcement and/or emergency communications must be corrected immediately. The operation of equipment covered by this Site Plan shall not interfere with United States Government radio or electronic operations already in existence on public land within two (2) miles of the site to which this authorization refers. The user causing this interference, shall, at its own expense, take all action necessary to prevent or eliminate such interference. If it does not eliminate such interference within ten (10) days after receipt of notice from the Bureau of Land Management to do so, this use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds will be established and appended to this Plan.

## **l. Cables and Transmission Line (Wave Guides)**

All new cabling will be jacketed and shielded and shall either be flexible or semi-rigid type. Existing substandard cables will be upgraded as repairs or replacement become necessary.

Cables will be properly installed and will be strapped and fastened down. All transmission lines (wave guides) are to be supported in accordance with manufacturer's specifications. Unjacketed transmission line of any type is prohibited. No transmission lines shall be left un-terminated.

Double shielded braided or solid shielded cable will be used. No RG-8 type cable is permitted. No connector-type adapters will be used on transmissions lines. Only correct connectors that will mate to connected devices are to be used.

## **m. Radiation**

All communications uses must meet ANSI, FCC and Bureau of Land Management regulations guidelines and standards concerning radiation limitations. Monitoring radiation levels at the site is the responsibility of all site users and will occur at intervals to comply with FCC regulations and guidelines. A copy of the monitoring report will be provided to the Bureau of Land Management within 30 days of its completion.

Onsite RFR measurements will be taken using appropriate equipment that can adequately measure both on-tower and on the ground levels before mitigation measures related to RFR are implemented. Security fences with RFR notice signs are required around areas that exceed public use levels. All fencing location and design will be pre-approved by the Bureau of Land Management.

Warning signs will comply with ANSI C95.2, color, symbol, and content conventions. Contact information including name and telephone number will also be included on warning signs.

Lowering power levels for on-tower access during maintenance will be coordinated between affected users.

Any identified RFR radiation problems that are, or could be, a human health hazard must be corrected within 24 hours after measurement tests have been completed or be removed from the site by the site user(s). If the proposed corrective action involves any new ground disturbance, it must be pre-approved by the BLM.

Personnel RF energy exposure levels shall be determined at all new RF energy source installations before normal operations are initiated. Field installation and maintenance procedures must include methods of protecting employees and others from RF energy levels that exceed the guidelines.

## **n. Security and Law Enforcement**

The Bureau of Land Management will be responsible for enforcing matters related to uses of BLM lands (e.g. resource protection issues).

## **o. Fencing**



These sites are remote. Fencing of the communication sites shall be permitted to reduce vandalism, provide for public safety, keep out livestock, and provide protection to facilities. Any fencing material and location must be approved by the BLM Authorized Officer prior to installation.

Galvanized steel chain link fence or Barbed wire and green steel posts will be permitted, on a case by case basis.

Fencing will be required around any guyed antenna tower anchor points, to keep cattle from rubbing on the guy wires.

Cut and fill when constructing new fences shall be minimized.

All disturbed areas shall be seeded with a seed mixture approved by the BLM Authorized Officer.

**p. Fire Prevention and Hazard Reduction Requirements**

Facility owners and managers will be required to maintain a minimum of ten (10) feet clearance around their buildings and a minimum of ten (10) feet clearance around any propane tanks. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited while walking in flammable vegetation.

No explosives will be stored at sites. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers and stored away from sources of ignition and combustible materials. If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

At least one (1) U.L. rated 4 B.C. dye chemical fire extinguisher is required inside each building, prior to each June, fire extinguisher(s) shall be inspected and refilled by holders, if necessary.

All fire protection standards must be implemented by the beginning of fire season, unless otherwise agreed to, and then maintained throughout the fire season.

**VI. CONDITIONS FOR CONSTRUCTION, MODIFICATIONS OR EXPANSION**

In addition to the responsibilities listed in Section III, New Facility Owners and Facility Managers are responsible for:

**A. Proposal Submittal**

Pre-proposal activity: It is recommended that any party interested in making a proposal for use on the Owyhee Ridge Communications Site Complex consult with the Vale Field Office Realty Specialist for guidance and information related to the process prior to filing. We recommend that new proponents inquire with the Vale Field Office prior to filing with the FCC.

Need to Occupy: New proponents will be required to demonstrate a valid need to occupy the

Owyhee Ridge Communication Site Complex that cannot be achieved elsewhere or within existing facilities. The Reality Specialist in charge will determine need based on documentation received and independent inquiry.

Actions Requiring Submittal of Proposals: A Proposal for authorization to construct a new facility (building or tower) or modify an existing facility is required in all cases (not to include antennas). Transferring existing authorized use or ownership requires an application. Applications are required for:

- a. Major change in size, shape (silhouette or "density") of antenna support structure.
- b. New building.
- c. Building modification changes in size, shape, (silhouette) or addition to building.
- d. New antenna support structure.

**B. Users are required to notify the BLM, and notification is required for the following activities:**

- a. Change in frequency.
- b. New frequency.
- c. Change in transmitter power output (TPO).
- d. Change in antenna efficiency or ERP.
- e. New type or class of service.
- f. Change in location of transmitters.
- g. Other condition/situation (Check with Vale Field Office.)

**C. Proposal Process:**

**Proposals should be submitted to:**

Bureau of Land Management  
Vale District Office  
100 Oregon Street  
Vale, Oregon 97918

- a. **Proposals shall include the following as appropriate:**
- b. Application Form: SF299 - available at: <http://www.or.blm.gov/Vale/Information/SF-299.pdf>
- c. FCC license, construction permit, frequency assignment, station license, etc., or NTIA/IRAC Authorization. Cost recovery fees will be submitted with the application, or as determined by a BLM authorized officer.
- d. BLM Communication Site Technical Data Report Form (request form from Vale District Office)
- e. Plot Plan - Tie to existing monuments on the site plan.
- f. Complete certified building plans and construction details will be required prior to final approval. Conceptual drawings will be accepted to initiate proposal feasibility. County building permit will be required before final authorization is given.
- g. Manufacturer and specifications of proposed tower, antenna supporting structure, and/or antenna(s) including site-specific design criteria and structural analysis.
- h. Tower base details including cross-section concrete strength, reinforcing, grouting material,

anchoring methods and device. Proposed maximum cross-sectional loading of antennas and attachments. Primary contractor (name, address, telephone number).

- i. Timetable for completion.
- j. Evidence of Compliance with Malheur County Planning and Building Regulations.

Note: An application is not complete and cannot be processed until all information deemed necessary by the Authorized Officer is provided in an acceptable form. Submittal of an application does not guarantee occupancy and use of a site. Two copies of the packet are needed. One is for the Bureau of Land Management and one for the existing lessee to share with any tenants.

Environmental Analysis and Documentation: An environmental document will be produced and required resource clearances obtained before any work proceeds. The proponent may be responsible for preparing and obtaining these documents unless the BLM, through voluntary cooperative funding by the applicant, has the resources available to do the work. EPA Compliance: The National Environmental Policy Act of 1969 (NEPA) requires all federal agencies to ensure that the environmental effects of their actions are given appropriate consideration. Scoping is required on all proposed actions including those that would appear to be categorically excluded. If extraordinary circumstances are present and it is uncertain that the proposed action may have a significant effect on the environment, an environmental assessment (EA) will be prepared by the proponent. If scoping indicates that the proposed action may have a significant environmental effect, an environmental impact statement (EIS) will be prepared.

## **VII. CONSTRUCTION METHODS AND RESOURCE PROTECTION**

Plans submitted by an applicant for any new construction or modification shall specify provisions for rehabilitation measures including, but not limited to, soil replacement and stabilization and for proper handling of runoff from buildings, parking areas, access roads, and undeveloped common areas.

The following methods and resource protection measures will be required to minimize impacts during construction:

1. Avoid and protect sensitive resource areas, as identified by the BLM.
2. During construction and /or maintenance, paintbrushes will not be cleaned off on rocks around site and no marks of any kind (including survey marks) will be permitted on rocks.
3. Minimize ground disturbance and vegetation removal as much as possible during construction activities. All ground disturbing activities require BLM approval.
4. Any extensive cut and fill slopes will be re-vegetated with vegetation species approved and within timeframes defined by BLM as soon as possible after construction. All re-vegetation requires BLM pre approval. If necessary, reseedling will be required until vegetation is successfully established as determined by the BLM.
5. No grading material will be cast off during construction/reconstruction activities. Excess soil can be used for fill material on road and/or building/tower pads.

6. Temporary, on site storage of construction materials will require pre approval by the BLM.
7. Construction materials and supplies, except for hazardous materials (see number 8 below) may be left unattended at the construction site at the end of each workday, but at the owner's risk.
8. Hazardous materials, including, but not limited to all fuels, oils, and lubricants are not to be left unattended at the site at any time. During construction, these materials are to be removed from the site at the end of each workday, or temporarily stored inside a locked and signed building until the following workday.
9. All surplus construction materials and/or waste debris must be removed from the site no later than thirty (30) days after construction has been completed.
10. Any earth moving or heavy equipment (e.g. dozers, graders, cranes, backhoes, etc.) leaving the designated roadway and/or approved parking area(s) to perform authorized activities at the site, will be washed off prior to being brought onto public land, and before leaving public land, to prevent the introduction and spread of noxious weeds into and out of the area.

#### **VIII. CONSTRUCTION INSPECTION**

1. All new construction, reconstruction, or major modification shall conform to the established technical standards and accepted engineering practices (i.e. the Uniform Building Code).
2. Any construction inspections required by other applicable agencies are the responsibility of the holder. Copies of completed inspections are to be provided to the Field Manager, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the proponent's casefile.
3. The Holder agrees that corrective work detailed in BLM, or other agency required compliance inspections, will be completed by the scheduled completion date. If the Holder disagrees or has questions about specific items, the Holder must contact the BLM in order that the disagreement or item may be resolved.
4. A final set of as-built plans will be submitted to the Field Manager within 90 days of acceptance of structure (if contracted) or of completion date.

#### **IX. NEW OR REMODELED/EXPANDED BUILDINGS**

1. Any new buildings must be designed to accommodate multiple users along with fitting into the physical environment as defined in a site specific environmental analysis developed at the time of the proposal.
2. Buildings are required to be one-story. The roof must be metal or covered with metal to be fire resistant. Roofs can be equipped with antenna support structures, such as poles and railings.
3. Facility Owners and Facility Managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:

- a. Sublease sections to others;
  - b. Provide tenants and customers with internal separation and security;
  - c. Reduce physical interference; and
  - d. Increase management effectiveness.
4. The following materials are approved for construction of new facilities (i.e. buildings)
- a. Floors – Concrete slab with drainage.
  - b. Walls - Concrete block or pre fabricated concrete.
  - c. Roof - Metal, or concrete, if painted to eliminate shiny surfaces, or other fireproof material as approved by the BLM. Proposals for wooden roofs will not be approved.
  - d. Partitions – If it is felt partitions are necessary in buildings, ensure they are constructed with fire resistant material (e.g. concrete block, reinforced concrete, or properly grounded expanded metal.
  - e. Color - Proposed color for use on all exterior building surfaces must be pre approved by the BLM. The goal of the color selection for the facilities is to make the building as inconspicuous as possible. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non reflective, BLM approved brown, dark gray and green colors will be used on equipment buildings.
  - f. Pre fabricated equipment shelters which meet the above requirement may be approved.
5. Building entry lights must:
- a. Only light the immediate area in the vicinity of the door;
  - b. Be motion activated and have a limited time duration (e.g. 3-5 minutes); and
  - c. Have a shielded beam that is pointed at the building door.

Requests for all night (i.e. “dusk to dawn”) lighting, or entry lighting that would be visible from outside of the site will not be approved.

#### **X. NEW or REMODELED/EXPANDED TOWERS**

1. All new construction, reconstruction, and modifications to towers will be pre approved by the BLM prior to implementation.
2. It is the applicant/holder’s responsibility to assure that a new, or modified, structure will not unduly interfere electronically or physically with any existing equipment at the site. Towers must be spaced, so as to prevent ground level radiation and/or interference problems. This must be clearly

demonstrated in writing to the BLM prior to issuance of a lease, permit, or amendment.

3. All new towers will comply with current structural and safety specifications and design standards, including safety climbing devices. Towers should be as narrow and “open” as safety and structural integrity allow. New towers will be designed using maximum wind, snow, and/or tower loading anticipated for the site.

## **XI. STANDARDS**

### **A. Tenant Information**

The Lessee shall provide the Authorized Officer a list of current phone numbers and addresses of all tenants and customers as of September 30 each year.

### **B. Facility Identification**

All facilities shall be identified on the BLM site map. All facilities shall have their contact telephone number placed on the outside of the facility door.

### **C. Signs**

Any signs required by law or as additionally stipulated by the BLM will be provided and installed by the lessee in accordance with standards and instructions as specified by the Bureau of Land Management. Hazard warning devices will be used when and where needed. Approved color coding for onsite hazard warnings are:

Object Markers:	White and black stripe
Construction signs:	Orange background
Warning signs:	Yellow background
Regulatory signs:	White background

### **D. Housekeeping**

Housekeeping has environmental, visual, aesthetic, and electromagnetic impact. Debris, which is permitted to remain adrift, and the residue of construction, installation, removal, modification, or other changes may raise the "noise floor" for all users by giving rise to intermodulation potential, which often defies identification. No such material will be allowed to accumulate.

All facilities shall be maintained in a neat, orderly fashion and reflect adherence to site plan and lease/right-of-way requirements and shall be subject to “Good Engineering Practice Standards.”

No insecticides or herbicides will be used outside the buildings without written approval by the BLM.

### **E. Inspections**

Inspection requirements are two fold - a general site inspection and a tower inspection by an independent party acceptable to the BLM Authorized Officer or by BLM employees. The focus of the inspection will be housekeeping items, grounding and bonding inspections

which can be observed from ground level (antenna support structure which will be inspected separately), and inventory confirmation. Lessees will provide a copy of the inspection report to the BLM and correct deficiencies within 30 days unless a different deadline is approved by the BLM Authorized Officer. Lessees will pay reasonable costs for follow-up inspections needed to confirm that deficiencies have been corrected. The follow-up inspections will be performed at BLM choice by either an independent party acceptable to the BLM Authorized Officer or by BLM employees

The antenna support structure (tower) inspection: Owners/Lessee of towers should perform initial and periodic tower inspection and maintenance to assure safety and to extend service life. It is recommended that major inspections be performed, at a minimum, every three (3) years for guyed towers and every five (5) years for self-supporting towers. Inspections should be done according to ANSI/EIA/TIA-222 (current version). The recommendations in those standards will be considered requirements by the BLM. The lessee will provide a certified statement to the BLM that the inspection was performed and that all deficiencies were corrected within 30 days of the inspection, unless approved by the BLM Authorized Officer.

## **XII. USERS ASSOCIATION (Future)**

- A. After two or more leases have been issued, a User's Association may be formed. The basic function of the Association would be to provide advice to the BLM. There would be no intent to give the Association any jurisdiction over lessees; nor would lessees be required to join. Any such Association will be made up of one representative of each lessee and one customer or tenant who will represent all customers and tenants. The single representative of all customers and tenants will be appointed by the BLM and serve at the BLM's discretion. Any constitution or bylaws, or their equivalents, will be approved by the BLM Authorized Officer.

- B. Suggested functions of an Association are as follows:

Accept an authorization on behalf of all site lessees for road development, maintenance, and use.

Assist the BLM with evaluation of new lease proposals when requested.

Perform a general site inspection to deal with issues raised in section IV. K. The purpose of this inspection would be to provide feedback to the BLM on general site conditions. The scope of the inspection would be confined to what can be seen on the outside of any lessee's facilities, unless a lessee specifically authorizes the Association to enter such facilities.

Assist the BLM, when requested, with resolving any issues, which arise between different lessees. The BLM will not use the Association in this context without the agreement of all lessees and unless all lessees are represented. An individual lessee can waive their right to representation and authorize the Association, by written notice to the BLM, to proceed in their absence.

## **XIII. LAND AVAILABILITY**

Any new construction will be confined to the area that has been specifically dedicated to this

communication site complex as shown in Appendix A, Maps.

#### **XIV. PLAN IMPLEMENTATION, MONITORING, AND REVISION**

- A. Owyhee Ridge Communication Site Complex Management Plan will become final and be implemented when it is approved by the Malheur Field Office Manager. It will become the primary reference document for management of the complex, and will be incorporated by reference into all new leases and renewals of existing leases in the complex.
- B. BLM will periodically make compliance or monitoring checks of all site users to determine if they are operating within the parameters of their approved right-of-way grant. These checks may be done on a basis determined by the BLM or upon the request of the site User's Association, should one be formed.
- C. Owyhee Ridge Communication Site Complex Management Plan will only be revised when the management actions prescribed no longer meets the communication and other resource management objectives, when those objectives are no longer valid, or when unforeseen circumstances require revision. If this communication plan is no longer valid, revision will be made using those steps and criteria identified in the current version of BLM Manual 2860.1.11.A. including public participation and the appropriate approvals.

#### **XV. APPLICATION PROCEDURES**

- A. No approval is needed if the communication use can be accommodated within an authorized existing facility (tenant/customer).
- B. Applicant contacts the BLM to arrange a pre-application meeting, completes a draft of the Application for Transportation and Utility Systems and Facilities on Federal Lands, SF-299, and a map. The BLM identifies and requests additional information needs and encourages the applicant to collocate with an existing facility.
- C. After receipt of a completed application package, the BLM processes it by serializing the application and setting up a right-of-way file, completing NEPA documentation, including decision; preparing a draft communication site lease for comment and review; requesting comments from existing site users; all technical electronic aspects of the proposal sent to the FCC for review (FCC file number and city broadcast must be present); determines rent and monitoring fees; and prepares and mails a decision letter to an applicant. Timeframes for issuing the lease varies case by case.
- D. The applicant accepts stipulations of the lease and communication site management plan, signs and returns the SF-299 and Form 2800-18, with rent and monitoring fees to the BLM.
- E. BLM authorizes the Communication Use Lease and Application for Transportation and Utility Systems and Facilities on Federal Lands. The applicant now becomes the lessee and must notify the BLM of the planned construction start date and arrange for a preconstruction meeting and follows through with all the requirements for the lease and communication site management plan.



## Appendix A

### See attached Map

## APPENDIX B

### OWYHEE RIDGE COMMUNICATIONS SITE COMPLEX

USER DATA TABLE  
(June 21, 2004)

User	Case File Number	Owner (O) Customer (C) Tenant (T) Exempt (E)	Use	Rent	Total Rent
Owyhee Irrigation District	OR-14197	E	Radio	0	0
State Board of Forestry		E	Radio	0	0
BLM Administrative Site	OR-13896	E	Radio	0	0
R&S Media	OR-56585	O	FM Transmitter	\$9,641.63 FY2004	\$9,642.63

Shaded rows are Lease/right-of-way Holders B White rows show customers/tenants.

## APPENDIX C

### SITE PHOTOGRAPHS Of Existing Buildings and Towers



Owyhee Irrigation Communication Site

BLM Communication Site

Both sites are located on Owyhee Ridge and are part of the proposed Owyhee Ridge Communication Site Complex. Sites are separated by approximately  $\frac{1}{2}$  of a mile.

Photo's show the Owyhee Irrigation and the BLM buildings and poles/towers. The BLM site shows a solar panel on the roof. The BLM pole is wooden and is no longer safe to climb and will, due to safety concerns, be replaced.

See next page for R&S Media Site.



R&S Media tower and building on Owyhee Ridge. Site D2.

**Appendix C (continued)**

## Appendix D

### COMMUNICATONS SITE INSPECTION CHECKLIST EXAMPLE

SITE NAME: \_\_\_\_\_ Date: \_\_\_\_\_

Inspector(s) Name: \_\_\_\_\_

I. Site Inspection. Each communication site should be inspected at least once each year. Inspection should include a careful examination of:

1. Power Systems
  - a. Power lines (10 ft. clearance from average snow level)
  - b. Solar Array
  - c. Generators – Fuel Storage
  - d. Batteries: safety venting, eye wash, goggles
  - e. Wiring
  - f. Protection (fuses)
2. Grounding
  - a. Building
  - b. Antenna system
  - c. Equipment
  - d. Lightning protection
  - e. Standby power
3. Conformance to
  - a. Equipment Manufactures Specifications, installations, maintenance
  - b. Conditions of Permit
  - c. Safety Standards
  - d. Specifications of Site Plan
  - e. Specifications of Site Design
  - f. Conditions of License or Authorization
4. Structures
  - a. Towers
  - b. Buildings
  - c. Cable Trays
5. Electromagnetic Environment
  - a. Site Noise Level
    - Ambient (noise floor) (General Electric ECP -877A)
    - Transmitter produced
  - b. Effective Receiver Sensitivity
  - c. Electromagnetic Radiation Safety
    - Levels (ANSI C95.1 – 1982)
    - Signing
    - Fencing
6. Housekeeping
  - a. Internal
  - b. External

## Appendix E

### COMMUNICATION TOWER INSPECTION CHECKLIST EXAMPLE

Tower Owner: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Inspector(s) \_\_\_\_\_

TOWER	Condition Good/OK/Poor	Peeling Paint Y= Yes N= No	YES	NO
Bent or fractured cross members?				
Loose or missing bolts?				
Broken or cracked welds?				
Signs of unusual stress?				
Twisted or distorted tower?				
Signs of rust, pitting, rot, etc.?				
Does the tower need paint or repair?				
Condition of galvanizing				
Condition of cat walk				
Condition of climbing pegs or steps				
Condition of fall safety system				
<b>Guy Wires</b>				
Broken guy wire strands?				
Any rust or deterioration noted?				
Guy wire connections				
Conditions of thimbles and shackles?				
Condition of preforms and or cable clamps?				
<b>Grounding System</b>				
Grounding clamps, straps/wires, broken or torn?				
Connection clean and secure?				
Lighting rod at the top of the tower?				
Signs of arcing?				
Gradual curves in grounding wires?				
Transmission line lightning-loop secure at the bottom of the tower?				
Condition of antenna grounding?				
Condition of transmission line grounding kits at the top and bottom?				
<b>Antenna and Transmissions Lines</b>				
Antennas stable?				
Bolts and connectors secure?				
Connections to transmission weather sealed transmission line brackets/wire ties secure?				
Waterproof jacket unbroken transmission line secured at 3 ft. intervals?				

Hoist grip secure?				
Gradual curves in transmission line?				
Cond. of antenna mounting hardware :				
<b>TOWER</b>	<b>Condition Good/OK/Poor</b>	<b>Peeling Paint Y= Yes N= No</b>	<b>YES</b>	<b>NO</b>
Physical damage to antenna and line (dents, cracks):				
<b>Notes:</b>				
<b>Action ITEMS: Things to be completed by:</b>				